

**Job Offer :**  
**Postdoctoral researcher (2 years)**

**Modeling the dynamics of Sargassum algae in the North Tropical Atlantic**

**Profile**

Since 2011, massive amount of Sargassum algae are stranding on the coasts of the Lesser Antilles, Central America, Brazil and West Africa, causing severe economical, ecological and health issues. Sargassum satellite index revealed that these strandings come from colossal quantities of algae drifting from the central tropical Atlantic, disconnected from the historical Sargasso Sea. The origins of the rise and continuation of these blooms are still debated (Johns et al 2020).

This job opportunity is part of the **FORESEA** project (FOREcasting seasonal Sargassum Events in the Atlantic) funded by the French Research Agency ANR. The overall aim of **FORESEA** is to build a forecast model of Sargassum dynamics at basin and regional scales. State of the art datasets are available within this project : (i) a new satellite-derived Sargassum index archive covering the last decade (ii) dedicated physical-biogeochemical interannual simulations based on NEMO-PISCES model and (iii) a surface drifter database. Using these datasets, the candidate will design an innovative Lagrangian approach to simulate Sargassum algae physical and biological dynamics (drift, growth and decay). After validation, the model will be used to identify the major drivers of seasonal and interannual fluctuations of Sargassum, and explore capabilities for forecasting the Sargassum influx in the Caribbean region.

Applicants should have a PhD in physical or biogeochemical oceanography (or related fields) with an experience in numerical modeling, excellent communication skills, and willingness to engage into multidisciplinary work.

**Laboratories and contacts:**

MIO, <https://www.mio.osupytheas.fr/>, Marseille, France  
MARBEC, <http://www.umr-marbec.fr/>, Sète, France

Interested candidates should send a CV and a motivation letter including two referees to Léo Berline ([leo.berline@mio.osupytheas.fr](mailto:leo.berline@mio.osupytheas.fr)) and Christophe Lett ([christophe.lett@ird.fr](mailto:christophe.lett@ird.fr)). The postdoc is expected to start in the first half of 2020. Review of applications will start in February 2020 until the position is filled. Duration is two years.

*Johns et al 2020, <https://doi.org/10.1016/j.pocean.2020.102269>*